UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/550,176	06/13/2006	Eric Dubois	13332-00007-US	7543
	7590 06/16/200 BOVE LODGE & HUT	EXAMINER		
PO BOX 2207		MUSSER, BARBARA J		
WILMINGTON, DE 19899			ART UNIT	PAPER NUMBER
			1791	
			MAIL DATE	DELIVERY MODE
			06/16/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/550,176	DUBOIS ET AL.				
Office Action Summary	Examiner	Art Unit				
	BARBARA J. MUSSER	1791				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on						
	-· action is non-final.					
<i>;</i> —	· 					
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
		3 3.3.2.3.				
Disposition of Claims						
4)⊠ Claim(s) <u>11-23</u> is/are pending in the application.						
4a) Of the above claim(s) <u>11-16</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>17-23</u> is/are rejected.						
7) Claim(s) is/are objected to.						
	<u> </u>					
	·					
Application Papers						
9)☐ The specification is objected to by the Examiner.						
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12)☐ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f)				
a) ☐ All b) ☐ Some * c) ☐ None of:	priority arraor oo o.o.o. g 110(a)	(4) 51 (1).				
1. Certified copies of the priority documents	s have been received					
		on No				
2. Certified copies of the priority documents have been received in Application No						
	3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) Paper No(s)/Mail Date Notice of Informal Patent Application						
B) ☑ Information Disclosure Statement(s) (PTO/SB/08) 5) ☐ Notice of Informal Patent Application Paper No(s)/Mail Date 9/21/05. 6) ☐ Other:						
1 apor 110(0), main batto <u>or 21/00.</u>						

Art Unit: 1791

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:

- Claims 11-16, drawn to a multilayer plastic tank, classified in class 220, subclass 562.
- II. Claims 17-20, drawn to a method of manufacturing a multilayer plastic tank, classified in class 156, subclass 308.2.

The inventions are distinct, each from the other because of the following reasons:

- 2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the process of manufacturing the multilayer tank in Group II can be used to manufacture a plastic container or cooler with a closure for emptying out liquids within the cooler.
- 3. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 11-16, drawn to a multilayer plastic tank with a plastic part.

Group II, claim(s) 17-20, drawn to a method of manufacturing a plastic tank.

Art Unit: 1791

4. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: the process of manufacturing the multilayer tank in Group II can be used to manufacture a plastic container or cooler with a closure for emptying out liquids within the cooler.

- 5. Restriction for examination purposes as indicated is proper because all these inventions listed in this action are independent or distinct for the reasons given above and there would be a serious search and examination burden if restriction were not required because one or more of the following reasons apply:
 - (a) the inventions have acquired a separate status in the art in view of their different classification;
 - (b) the inventions have acquired a separate status in the art due to their recognized divergent subject matter;
 - (c) the inventions require a different field of search (for example, searching different classes/subclasses or electronic resources, or employing different search queries);
 - (d) the prior art applicable to one invention would not likely be applicable to another invention:
 - (e) the inventions are likely to raise different non-prior art issues under 35 U.S.C. 101 and/or 35 U.S.C. 112, first paragraph.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a invention to be examined even though the requirement may be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election

Application/Control Number: 10/550,176

Art Unit: 1791

shall be treated as an election without traverse. Traversal must be presented at the time of election in order to be considered timely. Failure to timely traverse the requirement will result in the loss of right to petition under 37 CFR 1.144. If claims are added after the election, applicant must indicate which of these claims are readable on the elected invention.

Page 4

If claims are added after the election, applicant must indicate which of these claims are readable upon the elected invention. Should applicant traverse on the ground that the inventions are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

- 6. During a telephone conversation with Attorney Harold Pezzner on June 2, 2009 a provisional election was made without traverse to prosecute the invention of Group II, claims 17-20. Affirmation of this election must be made by applicant in replying to this Office action. It is noted applicant affirmed this election in the paper dated 6/2/09. Claims 11-16 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

8. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder.

All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Art Unit: 1791

Claim Rejections - 35 USC § 112

9. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

10. Claims 19 and 20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 19, it is unclear what is meant by "0.1% by weight of at least only polyalkyleneimine". For the purposes of examination, this is considered to require 0.1% by weight of polyalkyleneimine.

Claim Rejections - 35 USC § 103

- 11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 12. Claims 17, 18, and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short(U.S. Publication 2004/0071904A1) in view of Schmoyer(U.S. Publication 2003/0091741A1).

Short discloses a method of making a fuel tank by thermoforming a multi-layer sheet into a fuel tank.[0018] Thermoforming is a type of compression molding since it applies heat an pressure to mold a substrate into a given shape. The references also discloses the fuel tank is sulfonated.[0023] The reference does not disclose attaching a

sulfonated part to an opening of the fuel tank which closes the opening. Schmoyer discloses a method of sulfonating both fuel tanks and accessories such as filler necks and rollover valves.[0002] The reference discloses the accessories are placed in an enclosed chamber and sulfonated, suggesting they are not attached to the fuel tank at the time of sulfonation.[0013] It would have been obvious to one of ordinary skill in the art at the time the invention was made to sulfonate the accessories as suggested by Schmoyer and then attach them to the openings of the fuel tank, closing them off since Schmoyer suggests the accessories are sulfonated separately from the fuel tank and since they have to be joined to the fuel tank at some point. While Schmoyer does not explicitly state the accessories are applied to openings and close them off, the accessories cited are the same applicant claims in claim 23 and thus would be located in the same locations and close off the openings in the same manner.

Regarding claim 18, It would have been obvious to one of ordinary skill in the art at the time the invention was made to weld the accessory to the fuel tank since the use of welding to bond thermoplastics together is well-know and conventional in the thermoplastic bonding arts.

Regarding claim 21, since the accessory is located within a tank which is filled with material that sulfonates the polymer, the entire part including the portion which is later bonded to the fuel tank would be sulfonated.

Regarding claims 22 and 23, Schmoyer discloses the accessories can be filling necks and rollover valves.[0050]

13. Claims 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Short and Schmoyer as applied to claim 17 above, and further in view of the admitted prior art and Walles(U.S. Patent 3,613,957)

The references cited above do not disclose the specific polymers used or that the sulfonated polymer is rinsed prior to neutralization though Schmoyer does disclose the sulfonation is caused by sulfur trioxide[0011]. Schmoyer does disclose the sulfonated polymer is neutralized.[0038] The admitted prior art discloses adding a polyalkyleneimine to the polymer to be sulfonated. Walles discloses the sulfonated polymer is rinsed and then neutralized.(Col. 4, II. 47-59) It would have been obvious to one of ordinary skill in the art at the time the invention was made to include polyalkyleneimine in the polymer of the fuel tank of Short and Schmoyer since the admitted prior art discloses this is a known polymer for sulfonating and to rinse the treated polymer before neutralizing since Walles shows this is conventionally done and since Schmoyer discloses the sulfonation creates a rinseable salt.[0004]

As to the limitation of the accessory being molded, Schmoyer discloses that such accessories are conventionally blow molded.[0002]

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA J. MUSSER whose telephone number is (571)272-1222. The examiner can normally be reached on Monday-Thursday; alternate Fridays.

Art Unit: 1791

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571)-272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BJM /B. J. M./ Examiner, Art Unit 1791

/Richard Crispino/ Supervisory Patent Examiner, Art Unit 1791